CITY OF KIRKLAND

123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 587-3800

DEPARTMENT OF PUBLIC WORKS PRE-APPROVED PLANS POLICY

Policy G-6: UTILITY POLICY

The attached policy is established to describe the means and methods by which any contractor or franchised or legislatively empowered utility companies will be permitted to work within the public right-of-way of the City of Kirkland.

INDEX

| PUR | RPOSE | | . 3 |
|-----|---------|--|--|
| BAC | KGROUN | D | . 3 |
| POL | ICY OBJ | ECTIVES | . 3 |
| I. | ENSURE | PUBLIC SAFETY/MINIMIZE PUBLIC INCONVENIENCE | . 4 |
| | A. | Work Within the Pavement: 1. Arterial Streets: 2. Collector Streets: 3. Neighborhood Access Streets: | . 4 . 4 |
| | В. | Work Outside the Pavement: | . 5 |
| | C. | Work Areas Generally: | . 5 |
| II. | PROTEC | T THE PUBLIC INFRASTRUCTURE | . 6 |
| | A. | Quality Assurance/Quality Control/Inspection | . 6 |
| | В. | Reconstruction/Restoration Standards 1. Pavement: 2. Overlay Requirements: 3. Signalized Intersections: 4. Pavement Marking: 5. Sidewalk: 6. Aprons: 7. Curb and Gutter: 8. Street/Road Crossings: 9. Utility Marking: 10. Grass Areas and Trees: | . 7 . 8 . 9 . 9 . 10 . 10 . 10 |
| | | 11. Landscaped Areas Generally: | .11 |

| | | 12. Lakeshore Plaza/Park Lane: | |
|------|---------|---|---------|
| | | 12. Lakeshore Plaza/Park Lane:13. Environmentally Sensitive Areas: | 12 |
| | | , | |
| III. | FACILIT | TATE RIGHT-OF-WAY WORK | 12 |
| | ۸ | Chandanda fan Vaniana likiliku Flansanka | 12 |
| | A. | Standards for Various Utility Elements | |
| | | 1. Utility Element: | 12 |
| | В. | Right-of-way Permits | 14 |
| | | 1. When Permits Required: | 14 |
| | | 2. Obtaining Permits: | 14 |
| | | 3. Responsibility: | 15 |
| | | | |
| | CITY OF | F KIRKLAND - FIGURE T-1: STREET CLASS / STATE RO | OUTES16 |
| | | F KIRKLAND - PRINCIPAL AND MINOR ARTERIAL STR | |
| | CITY OF | F KIRKLAND - COLLECTOR STREETS | 18 |
| | | F KIRKLAND - PARK FACILITIES | |
| | | COUNTY, and RECREATION DISTRICT PARKS | |
| | • | I LANDSCAPED AREAS IN KIRKLAND | |

CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS UTILITY POLICY

Purpose

This policy is established to describe the means and methods by which any contractor or franchised or legislatively empowered utility companies will be permitted to work within the right-of-way of the City of Kirkland.

Background

The placement of utilities in the City's rights-of-way is at the discretion of the Public Works Department under Chapter 19.17 of the Municipal Code. Section 19.12.020 of the Code states that "...no person, firm or corporation shall disrupt a street, sidewalk or curb or place a utility in a right-of-way without obtaining a separate right-of-way permit for each disruption from the Public Works department."

It is recognized that there is a need to accommodate utility companies in their provision of public services; however, the City must ensure that the primary purpose of the roadway, passage of vehicular, bicycle and pedestrian traffic, is maintained to the greatest extent possible. The use of the roadway corridors by utility companies is secondary to the movement of traffic. This policy strikes a balance between the public need for efficient, safe transportation routes and utility services within these routes.

Policy Objectives

Based on the Municipal Code requirement, this utility policy has three primary objectives.

1. Ensure Public Safety / Minimize Public Inconvenience:

First, the City must ensure that the public safety is maintained and that public inconvenience is minimized by establishing time constraints for utility work, response time for utility repairs to the pavement, and standards for work zone safety.

2. Protect Public Infrastructure:

The second objective is to protect the public's infrastructure investment by establishing repair standards for the pavement when utility cuts are made, and by specifying the inspection requirements for street repairs.

3. Facilitate Right of Way:

The third objective is to facilitate utility work within the right-of-way through the standardization of utility placements and the maintenance of an efficient permit process.

To guide the staff, utility companies, and contractors in achieving the above stated objectives, the following policy has been prepared. The policy is intended to provide general guidance only. Specific requirements will be developed based on site-specific conditions. Also, as with any policy, exception may be granted as deemed necessary by the Director of Public Works or his designee. The City will conduct periodic reviews of the policy and invite utility companies'

input in order to make this document an effective tool for the conduct of our mutual responsibilities to serve our respective "customers".

I. ENSURE PUBLIC SAFETY/MINIMIZE PUBLIC INCONVENIENCE

Public Works Engineering is charged with managing and coordinating all construction in City rights-of-way and easements. A major objective is to ensure the public safety and to minimize inconvenience during the course of construction activities within the City. Accordingly, the constraints specified below vary according to the classification of the work area.

A. Work Within the Pavement:

1. Arterial Streets:

Arterial streets are those in the City designated as principal or minor arterials in the Kirkland Municipal Code, Section 19.08 (see attached listing). Being essential to the safe movement of the majority of citizens, these streets require stricter regulation to maintain the orderly and safe flow of traffic. Therefore, at minimum, no work will be performed on arterial streets during the peak traffic hours of 7:00 - 9:00 a.m. and 3:00-6:00 p.m., except emergency work to restore services. Because of higher traffic volumes, no new (i.e. open cuts) major work will be started on Fridays, and no road plates are to be in place over the weekend or holidays. Lane closures will be restricted to the working lane only and two-way traffic will be maintained at all times. Arterials shall be opened to traffic each night with all openings covered by a road plate with cold mix "ramps" or an asphalt patch. CDF backfill is required. The permanent asphalt patch shall be placed within one day after the work is completed. When notified by the City of an unsafe or unsatisfactory opening, the responsible utility company shall respond and repair said patch within four (4) hours.

2. Collector Streets:

These are all streets which connect local streets to arterial streets. Note: restrictions such as those for arterial Streets may apply depending on peak traffic hour activity. Generally, there will be no restrictions on work hour or work days; construction shall be limited to 7 a.m. - 8 p.m. Monday through Friday (emergency work excluded). Two-way traffic shall be maintained at all times during peak traffic times; one lane closure will be allowed between 9 a.m. and 3:00 p.m. with flaggers.

All patches in collector streets shall be closed each night and covered by a road plate with cold mix "ramps" or be surfaced with a temporary asphalt patch. The repair shall receive a permanent asphalt patch no

later than seventy-two (72) hours after work is completed. When notified by the City of an unsafe or unsatisfactory opening, the responsible utility company shall respond and repair said patch within twenty-four (24) hours.

3. Local Streets:

These are those streets and cul-de-sacs which provide direct access to adjacent property or individual homes. Generally, there will be no restriction on work hours or workdays. Construction hours shall be limited to 7 a.m. - 8 p.m. Monday through Friday (emergency work excluded). At least a single lane shall be provided for two-way traffic with a flagman available for control. Excavations in residential streets shall be protected each night; this may be achieved by using a temporary asphalt patch or a steel plate with cold mix "ramps", both with lighted barricades. The permanent asphalt repair shall be made no later than five (5) days after work completion. When notified by the City of an unsafe or unsatisfactory opening, the responsible utility company shall respond and repair said patch within twenty-four (24) hours.

B. Work Outside the Pavement:

All work areas outside the pavement shall be restored to their original condition or better after work completion. No pits/trenches shall remain open overnight. In no case shall any work area outside of the pavement be left in a disturbed state longer than (five) 5 days. When notified of a failure in the work area (i.e. pothole, patch failure, or cave-in), the responsible utility company shall respond and repair said work within twenty-four (24) hours.

C. Work Areas Generally:

Disturbed areas shall be limited to no more than 100 linear feet of open trench before temporary repairs are initiated.

Care should be taken in job site parking to avoid damage to sidewalks and landscaping. Any curb, gutter, sidewalk or landscaping damaged by the utility shall be removed and replaced within thirty (30) days after the damage has occurred. Parked vehicles and equipment shall not restrict private property access for both pedestrians and traffic, nor hinder sight distances for traffic.

All traffic control around construction sites shall be in accordance with the Manual for Uniform Traffic Control Devices (MUTCD) and the City of Kirkland Pre-Approved Plans, subject to modification for specific locations by the Kirkland City Traffic Engineer

Erosion and sediment control around work sites shall be in accordance with City of Kirkland Pre-Approved Plans. Inlet protection shall be provided at curb inlets and yard drains. Under no circumstances shall material be washed into storm drains. Excess material/sediment shall be allowed to dry and then be removed by vacuum sweeper or shovel and hauled away. Street washing shall be allowed only after sediment is removed in this manner. Effluent from dewatering operations shall be filtered or passed through an approved sediment-trapping device, or both, and discharged in a manner that does not adversely affect adjacent property. Saw cutting effluent and waste shall not enter the storm system and the contractor conducting the saw cutting shall be prepared to collect the effluent and waste before starting the work. Upon notification of excessive erosion or sediment around work sites, the responsible utility must take corrective action within 12 hours.

II. PROTECT THE PUBLIC INFRASTRUCTURE

The inspection process is the primary instrument by which the City seeks to protect the public investment in its infrastructure. Through a uniform and responsive inspection process, the public can be assured that work has been completed in accordance with current standards for reconstruction and site restoration. The objective of the City's inspection effort is to ensure that the City infrastructure attains its maximum useful life and utility restoration callbacks are minimized.

A. Quality Assurance/Quality Control/Inspection

The City's quality assurance effort complements the utility companies' quality control efforts. Quality assurance is provided through the Public Works Department staff, who are responsible for the inspection of all right-of-way work. The staff serves as liaison with utility companies and contractors to advise on construction standards, to coordinate activities between the City and other utility companies and to advise on the extent of restoration.

Quality control is the responsibility of the utility companies. The utility companies and contractors are expected to be familiar with the applicable standards referenced herein and to employ qualified subcontractors who utilize these standards in the restoration of the right-of-way. Utility companies and contractors who fail to comply with these standards risk exclusion from performing future right-of-way work.

Inspection services will be provided by the City as necessary and upon request by the utility companies or their subcontractors. In some cases, due to scope, location, or duration of the work, it is necessary to notify the inspector 48 hours before beginning the work. These cases will be noted at the time of issuance of the Right-of-Way permit as a condition of the permit.

The inspector's concern shall be focused on restoration of the right-of-way including backfilling, compaction, hazard protection, and repaving. Some

inspections will be ongoing throughout the course of a job whereas other inspections will be made only after completion of the work. Considerations which would dictate the need for ongoing inspection are: location of work, duration of work, size of area being disturbed, and public infrastructure being removed and replaced.

B. Reconstruction/Restoration Standards

All restoration shall result in a work site condition equal to or better than that which existed prior to construction. The following provisions will serve as guidelines for work in the City of Kirkland:

1. Pavement:

Before any digging commences in pavement, the pavement shall be sawcut or jackhammered around the perimeter of the proposed trench. An exception to this would be wheel trenching.

Pavement cuts shall be filled with compacted select material. Either concrete or asphalt patches will be placed to match at a minimum the existing street cross section. Select material shall include gravel borrow, 5/8-inch minus gravel, or controlled density (flowable) fill (CDF).

Select material (except CDF) shall be placed in an excavation in eightinch lifts and compacted with a vibratory plate compactor (for small openings), "jumping jack" (alongside pipelines) or with a static roller (for larger openings). Compaction must be 95% by modified proctor. Compaction by backhoe bucket is never acceptable.

In cases where it is impossible to achieve required compaction on select fill, or when achieving required compaction is critical (such as on an arterial), the City encourages and may require the use of controlled density fill material (CDF). Where CDF is required, CDF must be placed no later than noon on Wednesday so that a permanent asphalt patch may be placed by Friday afternoon. When CDF material is used, a steel plate with cold mix "ramps" will be placed to cover the opening for the time required to allow the material to set, but, in any case, for no longer than 24 hours. CDF materials must meet the most current WSDOT design and mixture standards.

Once the compacted backfill has been placed, the asphalt cutback shall be made. The cutback will extend 1 foot minimum on each side of the opening and will be over undisturbed existing base. All edges of the opening shall be neatly cut with an asphalt saw and uniformly tacked.

The new asphalt will be placed in lifts (three-inch max) and compacted upon placement. Asphalt depths will be governed by the existing cross

section of the street; new asphalt must be 1" thicker than the existing cross-section from a minimum of 3" to a maximum of 12". The joints must be sealed after the patch is installed. Concrete shall be used to replace concrete pavement wherever it occurs. The Inspector may modify the asphalt patch thickness when CDF is used.

Concrete edges shall be sawcut and new concrete placed with adequate protection during its curing.

For concrete pavement underlying asphalt, the concrete pavement may be replaced by base asphalt with two inches of asphalt for every one inch of existing concrete.

When it is necessary to use cold patch in an opening due to the unavailability of plant mix materials, the cold patch will be applied in lifts no greater than two inches thick.

Patches will be approved based on their general appearance as well as their "rideability." Rideability is defined as a leveling tolerance to within one-quarter inch (1/4") at any point across the patch as it relates to the surrounding asphalt street surface.

In all cases, site clean-up is necessary and required.

2. Overlay Requirements:

All public streets will be overlaid when any of the following conditions apply:

- a) When any utility is installed in the roadway and is parallel to the centerline of the right-of-way, the roadway must be overlaid from the centerline to the curb line or edge of pavement for the entire length of the utility extension.
- b) When any utility is installed in the roadway and is perpendicular to the right-of-way centerline, and, if there are three such crossings within 150 feet of each other, the roadway must be overlaid from the curb line to either the centerline or the opposite curb line, depending upon the location of the utility mainline which connects the crossings.
- c) When any utility is installed in the roadway and is at an oblique angle to the right-of-way centerline, the roadway must be overlaid from the centerline to the curb line for the entire length of the utility extension.
- d) When the permit conditions require street improvements, and the existing pavement is alligatored, the existing pavement must be overlaid from the centerline to the new curb line.

An adequate overlay will consist of a 2" grind around the perimeter of the proposed overlay, tack coat and a 2" overlay of class B asphalt, with sealing on all of the joints.

3. Signalized Intersections:

In no case shall a utility company or their contractor cut into the pavement of a signalized intersection without having contacted Public Works Maintenance and Operations Signal Shop at (425)587-3920 forty-eight (48) hours prior. Signal Shop will locate buried loop detection devices so as to protect them from damage. Any contractor who damages a loop detector will have the loop repaired or be charged for the repair or reinstallation of the device.

4. Pavement Marking:

Lane striping or other painted and affixed delineators which are removed by utility companies shall be replaced by the utility company before restoration will be considered complete. The inspector will notify the utility company of the product (traffic paint, thermoplastic, raised pavement markers, lane tape) and applications, and the City Traffic Engineer will approve all traffic delineation materials.

5. Sidewalk:

Sidewalks damaged by utility companies shall be removed and replaced in full sections. A section's size will be determined by the adjacent sections or the City inspector, but in any case no section shall be less than 5' in length.

All edges of concrete to be removed shall be sawcut and then formed from construction (or dummy) joint to joint. Any sections of sidewalk which have been undermined as work progressed will also be cut out and replaced with suitable backfill prior to replacement. See Sidewalk Section Pre-Approved Plan detail.

Should damage to the City sidewalks be observed after the work has been completed, the utility company shall be notified to perform the repairs within 5 days. Where sidewalk sections are removed at street corners, the sidewalk and adjacent curb shall be restored as a curb cut handicapped ramp. Construction of the ramp shall be in accordance with City of Kirkland standards.

6. Aprons:

Driveway aprons will not be "patched" following utility work. The utility company will notify the inspector when a concrete apron is to be disturbed; they will agree on the extent and restoration method. In any event, all edges of concrete restoration shall be sawcut and the property owner's access to his property shall not be unreasonably denied. In the event of a repair being necessary, an apron will be repaired with the same material from which it was made (i.e. exposed aggregate aprons will be repaired with exposed aggregate concrete).

7. Curb and Gutter:

When curb and gutter is replaced, it will be restored in full ten-foot (10') sections. Match existing curb elevations and ensure constant grade and positive drainage. Expansion material will be used at joints. Should the work include removal of a section which was finished with a dummy joint, the Contractor will saw cut the joint prior to forming and pouring the new section.

8. Street/Road Crossings:

The approved method of crossing a street in the City of Kirkland will be by jacking or boring the new pipe, service line or system extension under the street crossed. In some cases, it may be determined that a street can be crossed with an open cut to the pavement. However, in these cases, specific restoration standards and time constraints may be imposed.

These standards may include the use of road plating and a controlled density fill material to ensure uniform compaction as well as the ability to reopen the street to traffic at the earliest possible time. At no time should it be assumed that the City will permit an open pavement cut; these may be permitted but only as considered on a case-by-case basis.

9. Utility Marking:

The overly-large paint marks left after utility marking is a source of concern to the City of Kirkland. Marks made on curbs as well as beyond the location which will not be removed during construction have a tendency to remain in place for an indefinite time. Therefore, the City's policy will be that marks shall be large enough and frequent enough so as to be seen by the contractor but not so as to become graffiti on the pavements, curbs, and sidewalks. Marking of valve box and service locations shall be made neatly and be less than four inches square. As the use of concrete pavers and specialty concrete finishes increases, the

utility companies are specifically cautioned to be discrete with marks on these surfaces, whether on City-owned or private property. The utility company and their subcontractors are reminded that the Washington Utilities Coordinating Council recommends that proposed construction be marked in white paint, never in color.

10. Grass Areas and Trees:

Any work around trees or any new tree plantings shall be accordance with Policy R-10, Street Tree Selection List and Planting Procedures, in the Roadway section of this book.

All areas that have been landscaped prior to construction shall be restored to original or better condition. Un-landscaped areas that were otherwise covered with vegetation shall be reseeded with grass seed after construction. In areas that have been previously sodded, sod will be considered the appropriate restoration.

Trees will not be removed or heavily pruned in the course of programmed utility work without prior review by the City's arborist.

In the event that construction may impact a tree root zone area (that area underneath the drip line of the tree), the City may require boring the utility instead of an open trench.

11. Landscaped Areas Generally:

The City of Kirkland has done extensive landscaping in areas of the city, principally in medians of arterials. When work is planned in one of these planted areas, it is the utility company's responsibility to contact the Street Department at (425)587-3911 two (2) days prior to the start of work for consultation and possible removal/replacement of plantings. The Street Department will determine procedures to be followed for the maintenance of the plants and their policies will govern.

In cases where above-ground work needs to be screened or where existing plant materials must be replaced, the utility company will install landscaping materials in accordance with the Approved Landscaping List available at the City.

12. Lakeshore Plaza/Park Lane:

These areas consist of exposed aggregate sidewalks and pavement. These finishes are difficult to match and may require replacement of entire slabs instead of patching. Extreme care is required when working in these areas. All work under the pavements in these areas will require prior coordination with the Public Works Department.

13. Environmentally Sensitive Areas:

Proposed utility work in environmentally sensitive areas, which include wetlands, streams, unstable slopes, and areas of differential settlement (i.e. peaty soils) may require a review by the City of Kirkland Planning Department for possible mitigation requirements. It is the utility company's responsibility to educate itself on the location of sensitive areas. The Planning Department has maps available showing these areas within the city limits, and can be reached at (425)587-3225.

III. FACILITATE RIGHT-OF-WAY WORK

The City recognizes that work within its rights-of-way by utility companies is necessary in order to provide our citizens with essential services. Accordingly, an efficient and responsive right-of-way permitting process has been established to avoid delays in allowing utility companies to maintain service to their customers. Also, by establishing uniform placements for utilities, conflicts between utilities may be minimized, benefiting all parties.

A. Standards for Various Utility Elements

The following information provides location and configuration standards for utilities for new subdivisions and site plans, existing streets, easements, and on City capital projects. The goal is to standardize and document City requirements regarding the placement of utility systems in accordance with applicable City Pre-Approved Plans, Codes, and Comprehensive Plans.

Utility Element:

Meters:

Water meters are to be located within two feet of the back of curb or sidewalk or at the property line where there is no curb or sidewalk. Where new driveway aprons are to be built over existing water meters, the City shall notify the utility and advise the homeowner of conflict consequences.

2. Valves:

All valves are to be installed with valve boxes set flush (1/8" + tolerance) with adjacent surfaces and located out of the pavement, if possible. Gas

valves for private services shall be located at or near the property line, outside of concrete sidewalks. When notified by the City of the settlement of a valve box, the utility company shall raise the box within one week.

3. Vaults:

Locations of all vaults (telephone and electric) shall be coordinated with the City on a case-by-case basis. Access to vaults shall be through standard manhole castings. Vault lids in sidewalks, paths, cross walks, or other pedestrian areas shall be coated with "slip-not" coating or equal; see Pre-approved Plan Policy G-2 Non-slip Covers for all Utilities in Pedestrian Areas.

4. Poles:

New utility poles will not be allowed. Replacement or relocated utility poles shall be placed behind the sidewalk or, if no sidewalks are present, as close to the property line as possible. Downguys shall be minimized and provided with covers. Unused or abandoned guy anchors shall be completely removed (not cut flush). In specified areas (e.g. downtown Kirkland) and in any new development (i.e. capital projects, site plans and subdivisions) the City reserves the right to require underground services. Any proposed overhead facilities will be subject to review by the Development Engineering Manager. The Development Engineering Manager shall also review any proposed changes to existing overhead utilities in existing developed areas.

5. Sewer Cleanouts:

Sewer cleanouts will be provided on all laterals at the property line. Cleanouts or riser pipes will be capped and marked prior to backfilling.

6. Panel Boxes, Distribution Boxes, Transformers, Pedestals, Switches, etc.:

Ground level elements shall be painted, either green, black or brown (unless aluminum or stainless), and/or screened from view by plantings as approved by the Landscaping list. When installed alongside open drainage ditches such above-ground items shall be placed 10 feet away from the top of the ditch to allow for access by slope mowing equipment.

7. Underground Cables and Pipelines:

In new developments, the City reserves the right to review the location of all underground facilities prior to their construction. In general, the City prefers that franchise utilities be located behind the sidewalk and/or outside of the traveled portion of the street. These locations maximize

utility separation and remove "active" utilities from the major travel portion of the roadways.

8. Hydrants:

Hydrants shall be placed within the landscape strip behind the curb or behind the sidewalk. The riser pipe shall be centered in the landscape strip, or shall be at least 2' away from the sidewalk, and a 36"-radius clearance shall be provided around the hydrant.

B. Right-of-way Permits

The City monitors utility work through the utility permitting process. This process allows the City to coordinate activities between City forces and other utilities, to maintain a record of street cuts and patches and to identify specific City requirements.

1. When Permits Required:

Any work within the right-of-way which disturbs the pavement, curb and gutter, driveway entrances, sidewalk, landscaping or grassed areas, requires a permit.

This work may include, but is not limited to: utility main and/or lateral replacement and repair; valve replacement and repair; installation of new underground mains or laterals, structures or accessories; splices, buried drops (under pavement or sidewalks); pole changes for height, accident, etc.; cathodic protection; boxes and vault installations and jacking or boring under the right-of-way where disturbance within the right-of-way may occur. Any utility work that does not disturb the right-of-way is exempt from the permitting requirement except to the extent that traffic detours, lane closures, or sidewalk closures must be approved by the City.

2. Obtaining Permits:

Before work within the right-of-way is started the necessary permit shall be obtained from Public Works Engineering. Unless otherwise agreed, emergency work requires that a permit be obtained as soon as possible but not later than 48 hours after the onset of work. Permits are usually issued for the time period requested by the utility company. However, when situations warrant, the permit expiration date may be extended when prior notification is received. If work on an existing permit has not been started by the expiration date, the permit will be cancelled and a new permit then required to initiate the work.

3. Responsibility:

The utility company, or contractor (Permit Holder) receiving the permit is held responsible for the work performed and the City will contact the Permit Holder for required adjustments or corrections regardless of whether the Permit Holder performed the work itself or subcontracted and assigned the work. The permit is issued to the utility company or contractor and that company is solely responsible for the work performed. The utility company or contractor shall have a copy of the permit on the job site at all times.

Utility companies shall be responsible for the condition of any right-ofway repairs. Pavement repairs shall be warranted until such time as the City shall overlay or reconstruct the pavement. Should the condition of the patch become such that additional pavement is in jeopardy of failure, then the utility may be held responsible for an area larger than the original repair. Other repairs (sidewalk, curb and gutter, trenches, etc.) shall be warranted for the reasonable life of such structures.

Future Development:

The City reserves the right to require service extensions to vacant parcels of property for future development, in order to preclude future disruption to the right-of-way.

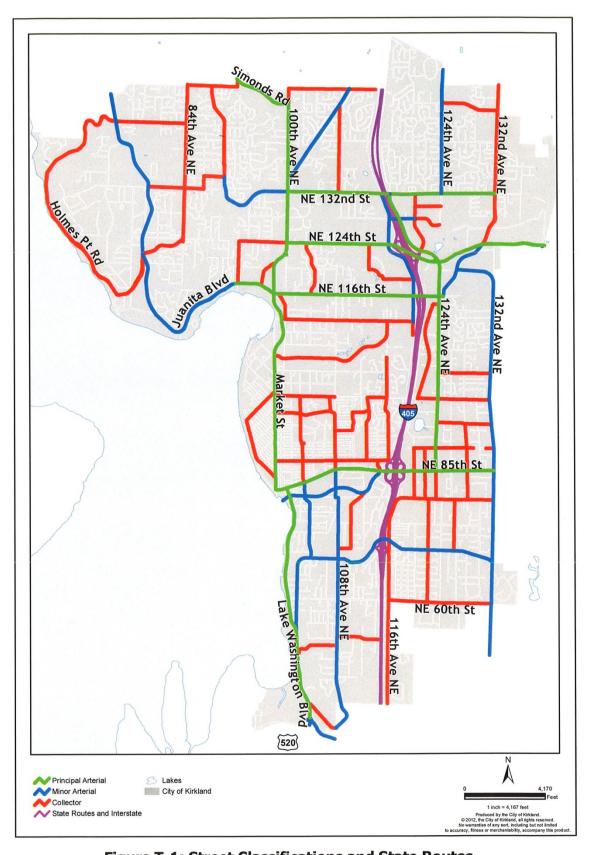


Figure T-1: Street Classifications and State Routes

CITY OF KIRKLAND - PRINCIPAL AND MINOR ARTERIAL STREETS

| | Street | <u>From</u> | <u>To</u> |
|-----|---------------------------------------|--------------------------|--|
| 1. | Central Way/NE 85th Street | Market St | E. City limits (132nd Ave NE) |
| 2. | Lake Street/Lake Washington Blvd. | Central Way | S. City limits (SR 520) |
| 3. | Market St./98th Ave. NE/100th Ave. NE | Central Way | Simonds Rd |
| 4. | Simonds Rd | 92 nd Ave NE | 100 th Ave NE |
| 5. | Juanita/Woodinville Wy NE | 100 th Ave NE | N. City limits (NE 145 th St) |
| 6. | Juanita Drive | 98th Ave NE | N. City limits (approx. NE 143 rd St) |
| 7. | NE 116th Street | 98th Ave NE | 124th Ave NE |
| 8. | NE 124th Street | 100th Ave NE | E. City limits (Willows Rd) |
| 9. | 120 th Avenue NE | NE 112 th St | NE 124 th St |
| 10. | 116 th Ave/Wy NE | NE 124 th St | NE 132 nd St |
| 11. | NE 128 th St | 116 th Ave NE | 120 th Ave NE |
| 12. | 124th Avenue NE | NE 85th St | NE 124th St |
| 13. | 124 th Avenue NE | NE 132 nd St | N. City limits (approx. NE 145 th PI) |
| 14. | NE 131st Way/NE 132nd Street | 90th Ave NE/NE 134th | 132nd Ave NE |
| 15. | Totem Lake Boulevard | NE 132nd St | 124th Ave NE |
| 16. | Slater Avenue NE | NE 116 th St | NE 124 th St |
| 17. | NE 120 th St | Slater Ave NE | 132 nd Ave NE |
| 18. | 132nd Avenue NE | NE 60 th St | NE 120th St |
| 19. | 6th Street S/108th Avenue NE | Central Way | S. City limits (NE 41st Dr) |
| 20. | Northup Way | Lake WA Blvd | City limit (Burgermaster) |
| 21. | Lakeview Dr. | Lake Wash. Blvd. | NE 68 th St |
| 22. | NE 68 th St | Lakeview Dr | I405 |
| 23. | NE 70 th PI/St | 116 th Ave NE | 132 nd Ave NE |
| 24. | State Street | Central Way | NE 68 th St. |
| 25. | Kirkland Ave | Lake St S | Kirkland Way |
| 26. | Kirkland Way | Kirkland Ave | NE 85 th St |

CITY OF KIRKLAND - COLLECTOR STREETS

| | Street | <u>From</u> | <u>To</u> |
|-----|---|----------------------------|--------------------------|
| 1. | NE 124th Street | 93rd Avenue NE | 100th Avenue NE |
| 2. | 93 rd Ave NE | Juanita Dr | NE 124 th St |
| 3. | 97 th Avenue NE | Juanita Dr | 100 th Ave NE |
| 4. | Holmes Pt Dr | s. end (Juanita Dr) | n. end (Juanita Dr) |
| 5. | NE 141st St | Juanita Dr | 84th Ave NE |
| 6. | NE 132 nd St | Juanita Dr | 87th Ave NE |
| 7. | NE 134 th St | 87 th Ave NE | 90 th Ave NE |
| 8. | 90 th Ave NE/88 th Ave NE | NE 134th | NE 145 th St |
| 9. | NE 122nd PI/NE 123 rd St | Juanita Dr | 84th Ave NE |
| 10. | 84 th Avenue NE | NE 123 rd | NE 145 th St |
| 11. | NE 145 th St | 84th Ave NE | Simonds Rd |
| 12. | 100 th Ave NE | Simonds Rd | NE 145 th St |
| 13. | NE 145 th St | 100 th Ave NE | Juanita/Woodinville Wy |
| 14. | 108 th Ave NE | NE 132 nd St | Juanita/Woodinville Wy |
| 15. | NE 144 th St | 124 th Ave NE | 132 nd Ave NE |
| 16. | 132nd Pl/Ave NE | NE 124 th St | NE 144 th St |
| 17. | 120th Avenue NE | Totem Lake Blvd | NE 132 nd St |
| 18. | NE 130 th Ln | 120 th Ave NE | 124 th Ave NE |
| 19. | NE 128 th St | 120 th Ave NE | 124 th Ave NE |
| 20. | 113th Ave NE | NE 120 th St | NE 124 th St |
| 21. | NE 120 th St/NE 118 th St | 113 th Ave NE | 120 th Ave NE |
| 22. | NE 112th Street | 100th Avenue NE | 120th Avenue NE |
| 23. | 100 th Ave NE/99 th PI NE | NE 112 th St | NE 116 th St |
| 24. | 104 th Ave NE | NE 116 th St | NE 124 th St |
| 25. | Forbes Creek Dr | Market Street | NE 112th Street |
| 26. | 18th Avenue | Market Street | Crestwoods Park |
| 27. | 3rd Street | Central Wy | 18 th Ave |
| 28. | 15th Avenue | Market St | 6 th St |
| 29. | 6 th Street | Kirkland Wy | 15 th Ave |
| 30. | 5 th Place | 15 th Ave | 18 th Ave |
| 31. | 12 th Ave | 6 th Street | 110 th Ave NE |
| 32. | 110 th Ave NE | 12 th Ave | NE 97 th St |
| 33. | NE 97 th St | 110 th Ave NE | 112 th Ave NE |
| 34. | 116th Avenue NE | NE 87 th St | NE 107 th Pl |
| 35. | 7th Avenue/NE 87th Street | Market Street | 116th Avenue NE |
| 36. | 114th Avenue NE | Central Wy | NE 87 th St |
| 37. | 112 th Avenue NE | NE 87 th Street | NE 100 th St |
| 38. | NE 100 th St | 112 th Ave NE | 116 th Ave NE |

| 39. | Waverly Wy | Market St | 10 th St W |
|-----|-----------------------------|--------------------------|--------------------------|
| 40. | 10 th Street W | Waverly Wy | Market St |
| 41. | 120 th Avenue NE | NE 80 th St | NE 90 th St |
| 42. | 122 nd Avenue NE | NE 80 th St | NE 90 th St |
| 43. | 124th Avenue NE | NE 80 th St | NE 85 th St |
| 44. | 128 th Avenue NE | NE 80 th St | NE 95th St |
| 45. | Slater Avenue NE | NE 97 th St | 124 th Ave NE |
| 46. | NE 104th Street | 124 th Ave NE | 132 nd Ave NE |
| 48. | NE 100th Street | Slater Avenue NE | 132nd Ave NE |
| 49. | NE 95th Street | 124th Avenue NE | 132nd Ave NE |
| 50. | NE 90th Street | 120th Avenue NE | 128 th Ave NE |
| 51. | NE 80th Street | 116th Avenue NE | 132nd Ave NE |
| 52. | 116th Avenue NE | S. City limits (NE 41st) | NE 80 th St |
| 53. | 122nd Avenue NE | NE 60 th St | NE 80th Street |
| 54. | 124th Avenue NE | NE 70th Street | NE 80th Street |
| 55. | 126th Avenue NE | NE 70th Street | NE 80th Street |
| 56. | NE 73rd Street | 126th Avenue NE | 132nd Avenue NE |
| 57. | NE 60th Street | 116 th Ave NE | 132 nd Ave NE |
| 58. | NE 52nd Street | Lake Wash. Blvd. | 108th Avenue NE |
| 59. | NE 53 rd Street | 108th Ave NE | 114 th Ave NE |
| 60. | NE 38th Place | Lake Wash. Blvd. | 108th Avenue NE |
| 61. | 8th Street S | 9th Avenue S | Kirkland Way |
| 62. | 9th Avenue S | 8th Street S | 10th Street S |
| | | | |

CITY OF KIRKLAND - PARK FACILITIES

| | City Parks | Address |
|-----|------------------------------------|--|
| 1. | Brookhaven Park | 9911 NE 128 th St |
| 2. | Carillon Woods | 5429 106 th Ave NE |
| 3. | Cedar View Park | 11401 NE 90 th St |
| 4. | Cotton Hill Park | 110 th Ave NE/NE 98 th St |
| 5. | Crestwoods Park | 1818 Sixth Street |
| 6. | David E. Brink Park | 555 Lake Street S |
| 7. | Edith Moulton Park | 108th Ave NE/NE 137th St |
| 8. | Everest Park | 500 Eighth Street S |
| 9. | Forbes Creek Park | 11615 NE 106th Lane |
| 10. | Forbes Lake Park (undeveloped) | 9501 124th Avenue NE |
| 11. | Heritage Park | 111 Waverly Way |
| 12. | Heronfield Wetlands | NE 124th and 108th Place NE |
| 13. | Highlands Park | 11210 NE 102nd Street |
| 14. | Doris Cooper Houghton Beach Park | 5811 Lake Washington Boulevard |
| 15. | Juanita Bay Park | 2201 Market Street |
| 16. | Juanita Beach Park | 9703 Juanita Dr NE |
| 17. | Juanita Heights | 89th PI NE/NE 124th St |
| 18. | Kingsgate | 116 th Ave NE/NE 140 th St |
| 19. | Kirkland Cemetery | 12036 NE 80th |
| 20. | Kiwanis Park | 1405 10th Street W |
| 21. | Lake Avenue West Street End Park | 297 Lake Avenue W |
| 22. | Marina Park | 25 Lake Shore Plaza |
| 23. | Mark Twain Park | 10625 132nd Avenue NE |
| 24. | Marsh Park | 6605 Lake Washington Boulevard |
| 25. | McAuliffe Park | 10824 NE 116 th Street |
| 26. | North Kirkland Community Ctr./Park | 12421 103rd Avenue NE |
| 27. | North Rose Hill Woodlands Park | NE 100th and 124th Avenue NE |
| 28. | Norway Hill Park | 119th PI NE/NE 145th St |
| 29. | Ohde Avenue Pea Patch | 11425 Ohde Avenue |
| 30. | Peter Kirk Park | 202 Third Street |
| 31 | Phyllis A. Needy Neighborhood Park | 10811 NE 47 th St |
| 32. | Reservoir Park | 1501 Third Street |
| 33. | Rose Hill Meadows Park | 8324 124 th Avenue NE |
| 34. | Snyders Corner Park (undeveloped) | NE 70th and 132nd Avenue NE |
| 35. | South Rose Hill Park | 12730 NE 72nd Street |
| 36. | Spinney Homestead Park | 11710 NE 100th Street |
| 37. | Street End Park | 501 Lake Street S |
| 38. | Settler's Landing | 1001 Lake Street S |
| 39. | Terrace Park | 10333 NE 67th Street |

| 40. | Van Aalst Park | 335 13th Avenue |
|-----|-------------------------------|--------------------------------------|
| 41. | Tot Lot Park | 111 Ninth Avenue |
| 42. | Watershed Park | 4500 110th Avenue NE |
| 30. | Waverly Beach Park | 633 Waverly Park Way |
| 43. | Windor Vista | NE 141st St/111th Ave NE |
| 44. | Yarrow Bay Wetlands | Lake Washington Blvd. & NE Points Dr |
| 45. | 132 nd Square Park | 13159 132 nd Ave NF |

STATE, COUNTY, AND RECREATION DISTRICT PARKS

| 1. | Big Finn Hill Park (County) | NE 138 th St/Juanita Dr NE |
|----|---|---------------------------------------|
| 2. | Bridle Trails State Park | 116th NE & NE 53 rd |
| 3. | Juanita Woodlands (County) | NE 118 th St/Juanita Dr NE |
| 4. | OO Denny (Recreation District) | 12032 Holmes Pt Dr NE |
| 5. | St. Edwards State Park | 14445 Juanita Dr NE (Kenmore) |
| 6. | Taylor Fields (County) | 11724 NE 60 th St |
| 7. | Totem Lake Park (Conservation District) | 12207 NE Totem Lake Wy |

SPECIAL LANDSCAPED AREAS IN KIRKLAND

- 1. Gateway sign at Lake Washington Boulevard north of Points Drive
- 2. Gateway sign at NE 85th/114th Avenue NE
- 3. Gateway sign NE 124th/124th NE
- 4. Kirkland Avenue/3rd Street
- 5. Lakeview Drive/Lake Washington Boulevard
- 6. NE 52nd Street/Lake Washington Boulevard
- 7. 108th Avenue NE from NE 41st Drive to NE 68th Street
- 8. Central Way from Market Street to 3rd Street
- 9. Market Street from Central Way to Forbes Creek Drive
- 10. NE 70th Street from 116th Avenue NE to 132nd Avenue NE
- 11. NE 116th Street from 98th Avenue NE to 120th Avenue NE
- 12. NE 124th Street from 100th Avenue NE to 113th Avenue NE